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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,670	01/03/2002	Eliel Louzoun	42390P11425	8281

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EXAMINER

AUVE, GLENN ALLEN

ART UNIT PAPER NUMBER

2111

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/037,670

Applicant(s)

LOUZOUN ET AL.

Examiner

Glenn A. Auve

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,7-10,15,22-25,27,31-37,44-46,52-55,60,67-70,72-74 and 77-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,8-10,15,23-25,27,31-37,44-46,53-55,60,68-70,72-74,77 and 78 is/are rejected.
- 7) ☒ Claim(s) 7,22,52,67,79 and 80 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. It is noted that the examiner contacted applicant's attorney on 9 January 2006 in order to get approval for an examiner's amendment to the claims. Those changes were to claim 27, line 3 in order to correct an antecedent basis problem in that "the first requester" would be changed to just "the requester" and the dependency of claims 31 and 44 would be corrected. After further consideration and search, however, a new prior art reference has been discovered which is being applied to the claims as set forth below. Therefore, the formal examiner's amendment is not being entered to the claims at this time. Applicant should make the noted corrections in any amendment to the claims, if they are still applicable, in response to this Office action. Although they are not being formally made by examiner's amendment, the claims have been examined in anticipation of such amendments being made.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 is rejected based on lack of positive antecedent basis of "the shared resource" on lines 2-3,4, and 7.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,8-10,15,23-25,27,31-37,44-46,53-55,60,68-70,72-74, and 77-78 are rejected under 35 U.S.C. 102(e) as being anticipated by Snyder et al., U. S. Pat. No. 6,745,274 B1.

As per claim 1, Snyder shows a method comprising receiving from a first requester a request to write an identifier of the first requester to a set-by-write register that indicates if a component is available, the request comprising the identifier of the first requester (col.5, lines 12-15); determining, in response to receiving the write request from the requester, whether the component is available; and replacing, if the component is available, contents of the register indicating that the component is available with the identifier of the first requester to reduce access to the component and to permit access to the component by the first requester (fig.6 and col. 7, line 56 – col.8, line 30). Snyder shows all of the steps recited in claim 1.

As for claim 8, the argument for claim 1 applies. Snyder also shows that determining whether the component is available comprises determining based on an external indicator that the component is available (col.8 as noted above). Snyder shows all of the steps recited in claim 8.

As for claim 9, the argument for claim 8 applies. Snyder also shows that the external indicator comprises a flag (col.6, lines 3-10). Snyder shows all of the steps recited in claim 9.

As for claim 10, the argument for claim 1 applies. Snyder also shows receiving, from the first requester upon completion of access to the component by the first requester, a value indicating that the shared resource is available to replace the contents of the register (fig.6). Snyder shows all of the steps recited in claim 10.

As per claim 15, Snyder shows a method comprising receiving from a first requester a request to write an identifier of the first requester to a set-by-write register that indicates if a component is available, the request comprising the identifier of the first requester (col.5, lines 12-15); determining, in response to receiving the write request from the requester, whether the component is available; prohibiting accesses to the component by one or more additional requesters; replacing, if the component is available, contents of the register indicating that the component is available with the identifier of the first requester to reduce access to the component and to permit access to the component by the first requester; and allowing the first requester to indicate that the component is available (fig.6 and cols. 7-8 as noted above). Snyder shows all of the steps recited in claim 15.

As for claim 23, the argument for claim 15 applies. Snyder also shows that determining whether the component is available comprises determining based on an external indicator that the component is available (col.8). Snyder shows all of the steps recited in claim 23.

As for claim 24, the argument for claim 23 applies. Snyder also shows that the external indicator comprises a flag (col.6). Snyder shows all of the steps recited in claim 24.

As for claim 25, the argument for claim 15 applies. Snyder also shows receiving from the first requester a request to write a value indicating that the shared resource is available; determining, because of receiving the value indicating that the shared resource is available, that access to the component has been increased; and replacing the contents of the register with the

value indicating that the shared resource is available (fig.6). Snyder shows all of the steps recited in claim 25.

As per claim 27, Snyder shows a method of obtaining access to a shared resource comprising receiving a request to write a second value that comprises an identifier of a requester to a register, the request comprising the identifier of the requester; changing a first value to the second value in response to the request to write to the register if the register detects that the first value indicates that the shared resource is available; and limiting access to the shared resource (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the steps recited in claim 27.

As for claim 31, the argument for claim 27 applies. Snyder also shows reading the register to determine that the register contains the identifier (cols. 7-8). Snyder shows all of the steps recited in claim 31.

As for claim 32, the argument for claim 27 applies. Snyder also shows that the shared resource comprises a peripheral device in a computer system and the peripheral device contains the registers (col.3, line 49 – col.4, line 7). Snyder shows all of the steps recited in claim 32.

As for claim 33, the argument for claim 27 applies. Snyder also shows receiving from the register the first value indicating that the shared resource is available; accessing the shared resource; and changing upon completion of access to the shared resource, the second value to a third value increasing access to the shared resource (fig.6 and cols. 7-8). Snyder shows all of the steps recited in claim 33.

As for claim 34, the argument for claim 33 applies. Snyder also shows that changing the second value to the third value comprises writing the third value to the register (fig.6 and cols. 7-8). Snyder shows all of the steps recited in claim 34.

As for claim 35, the argument for claim 34 applies. Snyder also shows that the first value, the second value, and the third value comprise variables (fig.6 and cols. 7-8). Snyder shows all of the steps recited in claim 35.

As for claim 36, the argument for claim 35 applies. Snyder also shows that the first and third values comprise the same variable (fig.6 and cols. 7-8). Snyder shows all of the steps recited in claim 36.

As per claim 37, Snyder shows a method comprising executing by a process a request from a requester to write an identifier of the requester, the request comprising the identifier of the requester; determining by a register, in response to the request, whether a first indicator allowing access to a shared resource is present in the register; changing by the register if the first indicator is present, the first indicator to a second indicator comprising the identifier of the requester and reducing access the shared resource; sending by the register the first indicator to the process; determining by the process receipt of the first indicator; using by the process the shared resource; and replacing by the process the second indicator with a third indicator increasing access to the shared resource (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the steps recited in claim 37.

As for claim 44, the argument for claim 37 applies. Snyder also shows that replacing the second indicator with the third indicator comprises writing the third indicator to the register (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the steps recited in claim 44.

As for claim 45, the argument for claim 44 applies. Snyder also shows that the first indicator and the third indicator comprise the same indicator (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the steps recited in claim 45.

As for claims 46,53-55,60, and 68-70, the arguments set forth above for claims 1,8-10,15, and 23-25 generally apply. The claims in this group consist of "article of manufacture"

claims where the article comprises a machine accessible medium including instruction sequences that when executed cause a machine to perform the steps recited in the earlier method claims. Since Snyder is directed to a computer system and a process for using semaphores where methods and instructions are used to control the semaphores, the same portions set forth above for the method claims apply to these article of manufacture claims.

As per claim 72, Snyder shows an apparatus comprising a resource; a storage area in the resource; a first value in the storage area, which the storage area changes to a second value that comprises an identifier of a requester in response to a request from the requester to write the identifier of the requester that is included in the request to the storage area; and the second value in the storage area (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the elements recited in claim 72.

As for claim 73, the argument for claim 72 applies. Snyder also shows that the resource comprises a peripheral device in a computer system (col.3, line 49 – col.4, line 7). Snyder shows all of the elements recited in claim 73.

As for claim 74, the argument for claim 72 applies. Snyder also shows that the storage area comprises a register (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the elements recited in claim 74.

As for claim 77, the argument for claim 72 applies. Snyder also shows that the first value indicates that the resource is available (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the elements recited in claim 77.

As for claim 78, the argument for claim 72 applies. Snyder also shows that the second value reduces access to the resource (as noted above in fig.6 and cols.5,7, and 8). Snyder shows all of the elements recited in claim 78.



***Allowable Subject Matter***

5. Claims 7,22,52,67,79, and 80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments, see pages 10-14, filed 30 November 2005, with respect to the rejections of the claims under 35 USC §§101,102, and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Snyder as set forth above.

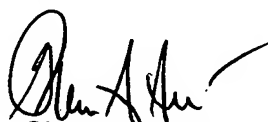
***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (571) 272-3623. The examiner can normally be reached on M-F 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn A. Auve  
Primary Examiner  
Art Unit 2111

gaa  
17 January 2006